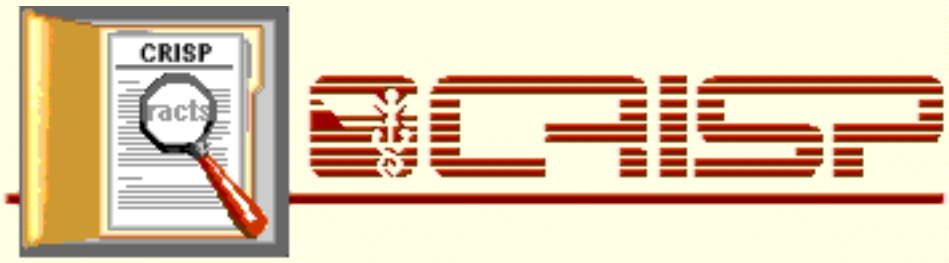
Version 2.0



Abstract

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Grant Number:	5R01NR003871-07
PI Name:	HATHAWAY, DONNA K.
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PI Title:	PROFESSOR/DEAN
Project Title:	DYSAUTONOMIA, EXERCISE, & POSTTRANSPLANT QUALITY OF LIFE

Abstract: *Quality of life is known to improve for kidney transplant recipients. However, long-term immuno-suppressant therapy contributes to the occurrence of adverse events that threaten achievement of optimal quality of life. Diminished heart rate variability is one problem that threatens not only quality of life but has also been associated with increased mortality. Fortunately, data indicate that heart rate variability can be improved by exercise, particularly in individuals who have severely compromised function and who are able to improve their exercise capacity. In addition to improving heart rate variability, exercise is also known to reduce other adverse events commonly seen in transplant recipients such as obesity, elevated lipids, hypertension, elevated insulin levels (syndrome X). If successful, exercise prescriptions would become an integral part of care regimens for post transplant recipients as well as other patients with chronic illnesses. The proposed randomized experiment study seeks to describe the effect participation in a structured exercise program has on long-term transplant recipients (1-10 years post kidney or kidney-pancreas transplant) and patients who have recently received a transplant. By comparing outcomes at 3 measurment points from experimental groups who participate in an exercise program to those of a non-exercising control group, we will be able to document how exercise affects heart rate variability, adverse events associated with syndrome X, and quality of life. By studying patients who are new transplant recipients as well as long-term recipients we will also be able to document whether a "window of opportunity" exists during which time an exercise program must be implemented in order to achieve benefit. Increasing numbers of patients are living longer with kidney transplants, costs associated with treatment of adverse events are under greater scrutiny, and quality of life outcomes*

are receiving greater priority. As these issues are considered it is important that health care providers devise interventions that will not just improve survival rates, but will also diminish adverse events and associated costs both of which contribute to improved quality of life. Our program of research has focused on quality of life outcomes, searching for biobehavioral linkages and predictors that could be the basis for interventions. We are now ready to test an intervention that has the potential to help a growing patient population have not only a longer life, but in addition, a life with fewer adverse events, reduced health care costs, and most importantly an optimal quality of life.

Thesaurus Terms:
autonomic nervous system, behavioral medicine, exercise, heart rate, human therapy evaluation, kidney transplantation, pancreas transplantation, postoperative state, quality of life
cardiovascular function, functional ability, gastrointestinal function, nursing intervention, questionnaire, vasomotion
behavioral /social science research tag, clinical research, electrocardiography, human subject, medical rehabilitation related tag, photoelectric plethysmography

Institution:	UNIVERSITY OF TENNESSEE HEALTH SCI CTR SCIENCE CENTER MEMPHIS, TN 38163
Fiscal Year:	2001
Department:	NURSING
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